

Excerpt of the Facilitator’s Guide

Excerpt from the facilitator guide demonstrating facilitation supports, implementation guidance, troubleshooting resources, and instructional scaffolding

PROGRAM OVERVIEW

Project Summary	Project Objectives
<p>In Life Simulated learners apply their understanding of percentages and algebraic expressions while developing financial awareness. During the project launch, learners select a profession, apartment, and cell phone plan. They use formulas in Google Sheets™ to track their monthly income, expenses, and balance.</p> <p>Each time learners play the simulation, they select four chance cards to simulate life’s unexpected expenses. They can earn or lose additional income by completing homework on time and being prepared for class. Round three includes a surprise twist when learners meet their soulmates and have a baby. With a baby comes additional expenses. The simulation concludes with learners taking a performance assessment and reflecting on their experiences.</p> <p><u>Project Implementation</u> The simulation is best taught during the Expressions and Equations unit after algebraic equations have been introduced. There are ten training session plans in the facilitator’s guide. Below are two possible schedules for implementing the project.</p>	<p><u>Learning Objectives</u> (Summatively Assessed)</p> <ul style="list-style-type: none"> ● Use variables to represent numbers in real-world problems. ● Evaluate expressions at specific values of their variables in real-world problems. ● Find a percent of a quantity as a rate per 100. ● Use ratio and rate reasoning to solve real-world problems. <p><u>Skills</u> (Formatively Assessed)</p> <ul style="list-style-type: none"> ● Use Google Sheets™ to write formulas to track income and expenses. ● Understand why algebraic equations and formulas are useful. ● Develop financial awareness.

Implementation Schedules

Option 1: Use the first four days to teach learners how to use Google Sheets™ and launch the simulation. Then, play the simulation every Friday for five weeks. All sessions are designed for 60-minute classes. There are two half-day sessions.

Sessions	Monday	Tuesday	Wednesday	Thursday	Friday
1	Project Launch 60 mins.	Intro to Google Sheets™ 60 mins.	Intro to Google Sheets™ 60 mins.	Budget Setup 60 mins.	Game On Round 1 60 mins.
2					Copy & Paste Round 2 60 mins.
3					Surprise Twist Round 3 60 mins.
4					Play On Round 4 30 mins.
5					Final Play and Reflection Round 5 60 mins.
6					Final Assessment 30 mins.

Option 2: Play the simulation every day for five days.

Weeks	Monday	Tuesday	Wednesday	Thursday	Friday
1	Project Launch 60 mins.	Intro to Google Sheets™ 60 mins.	Intro to Google Sheets™ 60 mins.	Budget Setup 60 mins.	Game On Round 1 60 mins.
2	Copy & Paste Round 2 60 mins.	Surprise Twist Round 3 60 mins.	Play On Round 4 30 mins.	Final Play and Reflection Round 5 60 mins.	Final Assessment 30 mins.

Assessment Planner

Assessments	Learning Objectives
<p>Session 3: Google Sheets™ Skills Check</p> <p>Formative</p>	<ul style="list-style-type: none"> ● Use Google Sheets™ to track income and expenses. ● Write formulas and use the SUM function. ● Understand why algebraic equations and formulas are useful. ● Use vocabulary related to Google Sheets™. ● Explain how cell addresses are similar to variables.
<p>Session 5: Round Two Knowledge Check</p> <p>Formative</p>	<ul style="list-style-type: none"> ● Find a percent of a quantity as a rate per 100. ● Use ratio and rate reasoning to solve real-world problems. ● Reflect on lessons learned during simulation.
<p>Session 9: Simulation Reflection</p> <p>Formative</p>	<ul style="list-style-type: none"> ● Explain the benefit of using a formula or algebra equation. ● Demonstrate financial awareness by spending the final simulation balance wisely.
<p>Session 10: Final Simulation Assessment</p> <p>Summative</p>	<ul style="list-style-type: none"> ● Use ratio and rate reasoning to solve real-world problems. ● Use variables to represent numbers in real-world problems. ● Evaluate expressions at specific values of their variables in real-world problems.

Sessions at a Glance

Sessions	Description	Time
Session 1: Project Launch	During the project launch, each learner chooses one of five professions: journalist, graphic designer, mechanical engineer, marketing assistant, or forensic scientist. Once professions are selected, learners are shown their monthly salaries. Next, they choose an apartment and cell phone plan and record their choices in their Project Planner.	60 mins.
Session 2: Intro to Google Sheets™	Learners learn Google Sheets™ and budget vocabulary. They practice the vocabulary by completing a vocabulary sort in teams.	60 mins.
Session 3: Google Sheets™ Exploration	Learners learn to navigate Google Sheets™, write formulas and functions, and understand that a cell address represents a variable.	60 mins.
Session 4: Budget Setup	Learners create a formula-based budget in Google Sheets™ to track their monthly expenses, income, and balance.	60 mins.
Session 5: Game On (Round 1)	Learners play round one of the simulation by selecting four Chance Cards. Chance cards represent unexpected expenses such as medical costs, a haircut, or the cost of a vacation. They can earn or lose additional income by completing homework on time and being prepared for class.	60 mins.
Session 6: Copy & Paste (Round 2)	Learners learn to copy and paste formulas from round 1 into round 2 and play the second round of the simulation.	60 mins.
Session 7: Surprise Twist (Round 3)	In round three, learners meet their soulmates and have a baby. Two additional baby cards are given in rounds three, four, and five.	60 mins.
Session 8: Play On (Round 4)	Learners play round 4 of the simulation and update their budgets. If you are short on time, you can skip round 4.	30 mins.
Session 9: Final Play & Simulation Reflection (Round 5)	Learners play the final round of the simulation and complete a simulation reflection.	60 mins.

Session 10: Simulation Assessment	Learners demonstrate their understanding of percentages and algebraic expressions on the Final Simulation Assessment.	30 mins.
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Before Launching the Simulation

- Print 2 to 3 copies of the **Chance & Baby Cards DOUBLE-SIDED** in color or black and white. Use card stock if possible. Laminate the cards if possible. Separate the Baby Cards and put them aside. You won't use them until Session Plan 5: Game On.

Learners will earn extra income for completing reinforcement tasks and bringing supplies to class.

- Decide which assignments you will use for extra income during each round of the simulation and how you will assign extra income.

For example, you could assign income based on whether reinforcement tasks are completed or not completed. If learners are assigned IXL or Zearn, they could earn income based on the number of lessons they complete. See the Session 4 Plan for more details.

- **Print 1 copy** of the Session Plans & Facilitator's Reference and print individual session plans as needed.

Session Plan 4: Budget Setup	Estimated Time:	1 Day
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Video Tutorial: Budget Setup

Video Link

Digital Materials	Prep
<u>Facilitator Digital Materials</u> <ul style="list-style-type: none"> ● Budget Setup Slideshow <u>Learner Digital Materials</u> - Upload one copy per learner <ul style="list-style-type: none"> ● Simulation Budget Google Sheets™ 	<u>Print</u> Chance & Baby Cards if you haven't yet. <ul style="list-style-type: none"> ○ Color or black and white. ○ Laminate if possible. ○ Separate Baby and Chance Cards <u>Materials</u> <ul style="list-style-type: none"> ● Learners will need access to their budgets.

Objective

<u>Learners will...</u> <ol style="list-style-type: none"> 1. Compare algebraic expressions and Google Sheets™ formulas. 2. Write formulas to calculate percentages and balance after expenses.


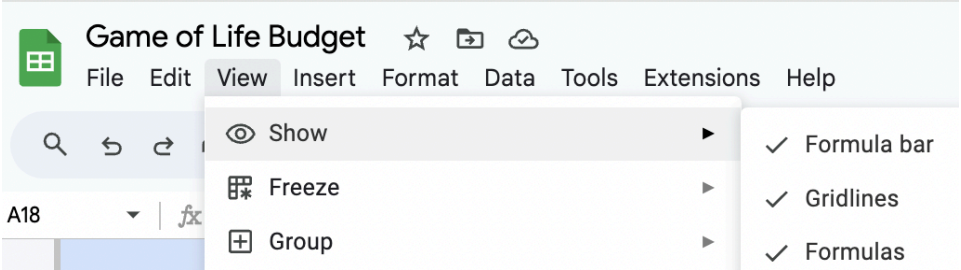

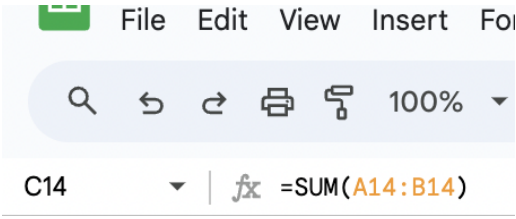
Facilitator Preparation

I advise completing this session before you teach it even if you are experienced in Google Sheets™.

It might be helpful to print the Session Plan. This session is most effective when learners work with a partner. Have learners check their partner's work before moving to the next step. Encouraging learners to collaborate, reread directions, and engage in problem-solving will enhance the success of this session. Use your Google Sheets™ helpers during this session.

Important: Learners will earn extra income for completing reinforcement tasks and bringing supplies. Before the next session, decide how to assign extra income. Finally, customize the reinforcement tasks and slides in the **Game On - Round 1** slideshow before the next session.

Section	Teaching Notes/Tips	Time
Knowledge Activation	<ol style="list-style-type: none"> 1. Use the slide notes on the Budget Setup slideshow to lead the session. 2. There is a lot to review in this session. You know your learners; omit unnecessary slides. 	5 mins.

<p>Step 1: Budget Setup</p>	<ol style="list-style-type: none"> Learners will use their Simulation Planner (paper copy glued in their notebook or collected) to record their fixed costs (green cells) in round 1 of their budget. Google Sheets™ only recognizes numbers, operators, and cell addresses. If learners need to record a zero in their budget, it needs to be written in number form, 0. Have learners double-check their partner’s budget after each formula is written. 	<p>5 mins.</p>
<p>Step 2: Writing Formulas</p>	<p>Important: Troubleshooting Google Sheets™</p> <ol style="list-style-type: none"> You can view formulas by looking at the formula bar.  Or, you can show all formulas by selecting View>Show-Formulas from the toolbar in Google Sheets™.  Follow the same steps to turn formulas off. Google Sheets™ will automatically try to populate formulas. Ask learners to ignore this feature by selecting the x when a formula appears.  When learners check each other’s work, remind them that formulas are shown in the formula bar. They must select a cell and then look at the formula bar to see the formula.  <p><u>Taxes</u></p> <p>The slides for finding tax (slides 9 -13) are scaffolded. You know your learners; omit unnecessary slides.</p>	<p>42 mins.</p>

	<p><u>Balance After Expenses & Balance After Rent</u></p> <p>A negative balance may result from learners swapping the order of the numbers. This is an opportunity to discuss the commutative property of subtraction.</p> <p><u>Total Monthly Expenses</u></p> <p>Learners frequently omit the equal sign or the last parentheses when using the SUM function.</p>	
<p>Optional - time permitting</p>	<p><u>Balance After Expenses</u></p> <ol style="list-style-type: none"> 1. If time permits, you can have learners write their balance next to their name on the whiteboard. This will allow you to quickly identify learners who have made an error in their spreadsheet. 2. Balance after expenses should range from \$246 (journalist: lowest salary and highest rent) to \$1,820 (engineer: highest salary and lowest rent) depending on the job and rent each learner selected. <p><u>Tip for Helping Learners</u></p> <ol style="list-style-type: none"> 1. Have learners show their formulas by selecting View>Show-Formulas from the toolbar in Google Sheets™ if their balance does not fall within the range. 2. Then they can compare their formulas with their partner's. <p>Budget Setup Facilitator Reference is located in Session Plans & Facilitator's Reference.</p>	<p>8 mins.</p>

SCENARIO-BASED SIMULATION CARDS

Scenario event cards used to reinforce financial decision-making and applied problem-solving during the simulation.

Chance Card

You bought new shoes for work. Record \$114.00 additional expenses.



Chance Card

You took a date to dinner. Record \$45.00 in additional expenses.



Chance Card

You had an unexpected surgery. Your insurance didn't cover 100% of the cost. Record \$350.00 in additional expenses.



Chance Card

You bought a super deluxe blender for your apartment. Record \$155.00 in additional expenses.

